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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

FEB 04 2011

Mr. John O'Donnell
The Commonwealth of Massachusetts
Executive Office for Administration and Finance
Division of Capital Asset Management
One Ashburton Place
Boston, Massachusetts 02108

Ms. Zehra Schneider Graham
Deputy Director
Environmental Health & Safety
University of Massachusetts Boston
100 Morrissey Boulevard
Boston, Massachusetts 02125-3393

Re: PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61 (a) and (c)
University of Massachusetts – Boston Utility Plant

Dear Mr. O'Donnell and Ms. Schneider Graham:

This is in response to the Notification¹ by the Commonwealth of Massachusetts, Division of Capital Assets Management (DCAM) and University of Massachusetts Boston (UMass, Boston) to abate PCB contaminated *porous surfaces* located in UMass, Boston utility plant transformer vault at 100 Morrissey Boulevard, Boston, MA (the Site). The Site contains PCB contaminated *porous surfaces* (e.g. concrete) that exceed the allowable PCB levels under the federal PCB regulations for unrestricted use at 40 CFR § 761.61.

The transformer vault houses four (4) transformer bays. Under this Notification, DCAM is proposing to address cleanup of the empty transformer bay (Phase 1) with cleanup of the remaining transformer bays (Phase 2) later this year. In its abatement plan, DCAM proposes the following activities for the empty transformer bay:

¹ Information was submitted on behalf of the Commonwealth of Massachusetts, Division of Capital Assets Management by Environmental Health & Engineering, Inc. The information was provided to satisfy the notification requirement under 40 CFR § 761.61(a). Information was provided dated October 7, 2010 (SIP); December 14, 2010 (Revised SIP); December 14, 2010 (Response to Comments); January 13, 2011 (Email response to questions); and January 28, 2011 (Response to Request for Information). These submittals will be referred to as the "Notification."

- Remove CMU block walls and dispose of as a greater than or equal to (\geq) 50 parts per million (ppm) PCB waste;
- Remove 4 inches from the top edge of the poured concrete curb along the west wall and dispose of as ≥ 50 ppm PCB waste; and,
- Encapsulate the PCB contaminated poured concrete column with epoxy and/or acrylic-based coatings.

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.61(a) for cleanup of PCB contaminated concrete block (CMU) and § 761.61(c) for encapsulation of the poured concrete column. DCAM has proposed a deviation from the verification sampling requirements under § 761.61(a)(6) for *porous surfaces*.

Based on the proposed abatement plan and the PCB sampling data, it appears that the proposed verification sampling, one sample taken every 10 feet, is sufficient to determine if the PCB cleanup standard has been met. EPA also has determined that the proposed encapsulation of PCB contaminated *porous surfaces* should effectively prevent direct exposure of these PCB contaminated *porous surfaces* to building users provided the coating is maintained. EPA finds that the encapsulation and the alternative verification sampling proposed by DCAM and UMass, Boston will create no unreasonable risk when completed in accordance with the Notification and this Approval. As such, EPA may approve the encapsulation and the alternative verification sampling under § 761.61(c).

This Approval only addresses PCB cleanup activities associated with Phase 1 of this project, specifically the empty transformer bay. A separate cleanup plan must be submitted to address the PCB contamination in the remaining transformer bays. With respect to the cast in place concrete outside of the empty transformer bay which has PCB concentrations at less than ($<$) 50 ppm, DCAM has determined that these products meet the definition of an *Excluded PCB Product* as defined at 40 CFR § 761.3.

DCAM and UMass, Boston may proceed with the project in accordance with 40 CFR §§ 761.61(a) and (c); the Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the long-term monitoring sampling indicate that the encapsulation is not effective and results in an unreasonable risk to the building users.

Please note that UMass, Boston will be required to record a notation on the deed as required under § 761.61(a)(8) since PCBs at greater than ($>$) 1 ppm will remain on the Site.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in dark ink, appearing to read "James T. Owens, III". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James T. Owens, III, Director
Office of Site Remediation & Restoration

Attachment 1

cc: Dale Pritchett, Environmental Health & Engineering, Inc
Michael Hurley, Mass DEP, Boston
File

ATTACHMENT 1:

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
COMMONWEALTH OF MASSACHUSETTS,
DIVISION OF CAPITAL ASSETS MANAGEMENT AND UMASS, BOSTON
UMASS, BOSTON UTILITY VAULT
100 MORRISEY BOULEVARD
BOSTON, MASSACHUSETTS**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to *PCB remediation waste* identified in the Notification and located at the Site.
2. The Commonwealth of Massachusetts, Division of Capital Assets Management (DCAM) and University of Massachusetts Boston (UMass, Boston) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the activities described in the Notification differ from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. DCAM must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, DCAM shall contact EPA within twenty-four (24) hours for direction on sampling and cleanup requirements.
6. DCAM is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time DCAM has or receives information indicating that DCAM or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within twenty-four (24) hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by DCAM are authorized to conduct the activities set forth in the Notification. DCAM is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release DCAM or UMass, Boston from compliance with any applicable requirements of federal, state or local law; or 3) release DCAM or UMass, Boston from liability for, or otherwise resolve, any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from DCAM and UMass, Boston of their acceptance of the conditions of this Approval within ten 10 business days of receipt.
10. DCAM shall notify EPA in writing of the scheduled date of commencement of on-site activities at least one (1) business day prior to conducting any work under this Approval.
11. Prior to initiating onsite work under this Approval, DCAM shall submit the following information for EPA review and/or approval:
 - a. A certification signed by its selected contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. A contractor work plan prepared and submitted by the selected contractor(s), detailing the procedures that will be employed for remediation of PCB-contaminated materials and for containment and air monitoring during removal and remediation activities. The plan should include copies of the MSDS sheets for the products that will be used for encapsulation. This work plan should also include information on waste storage, handling, and disposal for each waste stream type and for equipment decontamination; and,
 - c. A certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the analytical and quality assurance requirements specified in the Notification and in this Approval.

REMEDIAL AND DISPOSAL CONDITIONS

12. To the maximum extent practical, engineering controls shall be utilized to minimize the potential for PCB releases during the abatement. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
13. PCB-contaminated building materials shall be decontaminated and verification sampling and analysis shall be conducted as described below:
 - a. Following encapsulation of PCB-contaminated *porous surfaces*, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.
 - i) Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100\text{ cm}^2$). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - ii) In the event that any wipe sample PCB concentration wipe sample is greater than ($>$) $1\text{ }\mu\text{g}/100\text{ cm}^2$, DCAM shall contact EPA for further discussion and direction on alternatives.
 - b. The decontamination standard for *porous surfaces* (i.e. concrete) shall be less than or equal to (\leq) 25 parts per million (ppm) PCBs.
 - i) Verification sampling of *porous surfaces* shall be performed on a bulk basis (e.g. mg/kg) in accordance with EPA's draft Standard Operating Procedure For Sampling Concrete in the Field, dated 12/30/97 to a maximum depth of 0.5 inches and at the frequency described in the Notification.
 - ii) In the event any verification sample is greater than ($>$) 25 ppm, DCAM shall contact EPA to determine what modifications, if any, need to be made to the sampling frequency or to the abatement plan for the remainder of the project.
 - iii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

- iv) For decontaminated *porous surfaces* that have PCB concentrations exceeding the decontamination standard, DCAM may conduct additional decontamination to achieve the required decontamination standard.
14. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with § 761.40; stored in a manner prescribed in § 761.65; and, disposed of in accordance with 40 CFR § 761.61, unless otherwise specified below:
- a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination or dewatering shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

15. Within thirty (30) days of receipt of this Approval, UMass, Boston shall submit for EPA's review and approval, a detailed long-term monitoring and maintenance implementation plan (MMIP) for the surface coating. UMass, Boston shall incorporate any changes to the MMIP required by EPA.
- a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and reporting requirements.
 - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, other on-site workers, and interested stakeholders.
 - c. UMass, Boston shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the coating.

- d. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.
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- 16. Any modification(s) in the plan, specifications, or information submitted by DCAM, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. DCAM shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from DCAM to make a determination regarding potential risk.
 - 17. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
 - 18. Any misrepresentation or omission of any material fact in the Notification or in any future records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
 - 19. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; if EPA finds that these activities present an unreasonable risk to public health or the environment; if EPA finds that there is migration of PCBs from the Site; or if EPA finds that changes are necessary to comply with new rules, standards, or guidance for such approvals. DCAM may apply for appropriate modifications in the event new rules, standards, or guidance comes into effect.
 - 20. DCAM and UMass, Boston shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by DCAM or UMass, Boston to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

RECORDKEEPING AND REPORTING CONDITIONS

21. DCAM shall prepare all records and documents required by 40 CFR Part 761, including, but not limited to, the records required by Subparts J and K and shall submit same to UMass, Boston. UMass, Boston shall maintain a written record of the cleanup and the analytical sampling for activities conducted under this Approval at the Site. DCAM and UMass, Boston shall maintain all records and documents as required by 40 CFR Part 761. All records shall be made available for inspection by authorized representatives of the EPA, until such time as EPA approves in writing a request for an alternative disposition of such records.
22. DCAM shall submit a Final Completion Report (Report) to the EPA within 90 days of completion of the activities described under this Approval and shall submit same to UMass, Boston. At a minimum, this Report shall include: a discussion of the project activities; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests; and, copies of certificates of disposal or similar certifications issued by the disposer, if applicable. The Report shall include a certification signed by a DCAM official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
23. Within 120 days of completion of the cleanup activities described in the Notification and authorized by this Approval, and as required under §761.61(a)(8)(i)(B), UMass, Boston shall submit to EPA a certification, signed by a UMass, Boston approving official, that it has recorded the notation on the deed as required under §761.61(a)(8)(i)(A). A copy of the notation on the deed must also be submitted.
24. As required under Condition 15 of this Approval, UMass, Boston shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.
25. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912

26. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self disclosure or penalty policies.

END OF ATTACHMENT 1